IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) An isolated polynucleotide ~~according to Claim 5~~ which encodes a protein comprising the amino acid sequence of SEQ ID NO:2.

2 (Canceled)

3. (Previously Presented) An isolated polynucleotide which comprises SEQ ID NO:1.

4 (Currently Amended): An isolated polynucleotide which is complimentary to an isolated polynucleotide comprising SEQ ID NO:1.

5-9. (Cancelled)

10. (Currently Amended) An isolated polynucleotide, consisting of at least 30 consecutive nucleotides of ~~an isolated polynucleotide comprising~~ SEQ ID NO:1.

11 (Original): The isolated polynucleotide of Claim 10 which comprises SEQ ID NO:3.

12 (Original): A vector comprising the isolated polynucleotide of Claim 1.

13 (Original): A vector comprising the isolated polynucleotide of Claim 3.

14 (Original): A host cell comprising the isolated polynucleotide of Claim 1.

15 (Original): A host cell comprising the isolated polynucleotide of Claim 3.

16. (Previously Presented) The host cell of Claim 14, which is a Coryneform bacterium.

17. (Previously Presented) The host cell of Claim 15, which is a Coryneform bacterium.

18. (Previously Presented) The host cell of Claim 14, wherein said host cell is selected from the group consisting of *Corynebacterium glutamicum, Corynebacterium acetoglutamicum, Corynebacterium acetoacidophilum, Corynebacterium melassecola, Corynebacterium thermoaminogenes, Brevibacterium flavum, Brevibacterium lactofermentum,* and *Brevibacterium divaricatum.*

19. (Previously Presented) The host cell of Claim 15, wherein said host cell is selected from the group consisting of *Corynebacterium glutamicum, Corynebacterium acetoglutamicum, Corynebacterium acetoacidophilum, Corynebacterium melassecola, Corynebacterium thermoaminogenes, Brevibacterium flavum, Brevibacterium lactofermentum,* and *Brevibacterium divaricatum.*

20-36 (Canceled)

37 (Original): A method for making LuxR protein, comprising: culturing the host cell of Claim 14 for a time and under conditions suitable for expression of LuxR protein, and collecting the LuxR protein.

38. (Original): A method for making LuxR protein, comprising: culturing the host cell of Claim 15 for a time and under conditions suitable for expression of LuxR protein, and collecting the LuxR protein.

39. (Canceled)

40. (New) An isolated polynucleotide which is at least 70% identical to a nucleic acid sequence comprising SEQ ID NO:1, wherein said isolated polynucleotide encodes a protein having luxR transcriptional activation activity.

41. (New) A vector comprising the isolated polynucleotide of Claim 40.

42. (New) A host cell comprising the isolated polynucleotide of Claim 40.

43. (New) The host cell of Claim 42, which is a Coryneform bacterium.

44. (New) An isolated polynucleotide which is at least 80% identical to a nucleic acid sequence comprising SEQ ID NO:1, wherein said isolated polynucleotide encodes a protein having luxR transcriptional activation activity.

45. (New) A vector comprising the isolated polynucleotide of Claim 44.

46. (New) A host cell comprising the isolated polynucleotide of Claim 44.

47. (New) The host cell of Claim 46, which is a Coryneform bacterium.

48. (New) An isolated polynucleotide which is at least 90% identical to a nucleic acid sequence comprising SEQ ID NO:1, wherein said isolated polynucleotide encodes a protein having luxR transcriptional activation activity.

49. (New) A vector comprising the isolated polynucleotide of Claim 48.

50. (New) A host cell comprising the isolated polynucleotide of Claim 48.

51. (New) The host cell of Claim 50, which is a Coryneform bacterium.